

WHAT IS CLAIMED IS:

1. In an apparatus for treating cytological or histological specimens, said apparatus having multiple processing stations and a transport device for delivering said specimens into and out of said processing stations, a loading station for loading with specimens to be treated or object carriers carrying said specimens to be treated, and a removal station for removing said treated specimens or said object carriers carrying said treated specimens, the improvement comprising:
a plurality of processing stations allocated to said loading station.
2. The improvement as defined in Claim 1, wherein the number of processing stations in said plurality of processing stations is selected by a user and can be varied.
3. The improvement as defined in Claim 2, wherein up to four processing stations can be allocated to said loading station.
4. The improvement as defined in Claim 1, wherein said plurality of processing stations comprises selectable processing stations each having a specific function.
5. The improvement as defined in Claim 1, wherein said plurality of processing stations are allocated to said loading station by means of said transport device.
6. The improvement as defined in Claim 1, wherein said plurality of processing stations can be allocated manually to said loading station.
7. The improvement as defined in Claim 6, wherein said plurality of processing stations are bolted onto said loading station.

8. The improvement as defined in Claim 6, wherein said plurality of processing stations are clamped onto said loading station by means of a bracket.
9. The improvement as defined in Claim 1, wherein said plurality of processing stations are embodied as containers for said object carriers.
10. The improvement as defined in Claim 1, wherein said loading station is equipped with sensors for detecting the presence of processing stations therein.
11. The improvement as defined in Claim 10, wherein said sensors identify the number of processing stations in said plurality of processing stations.
12. The improvement as defined in Claim 1, wherein said loading station is equipped with sensors for detecting the presence of said object carriers located in said plurality of processing stations.
13. The improvement as defined in Claim 12, wherein said sensors identify the number of object carriers in said plurality of processing stations.
14. The improvement as defined in Claim 12, wherein the occupancy of said object carriers present in said loading station is indicated acoustically.
15. The improvement as defined in Claim 12, wherein the occupancy of said object carriers present in said loading station is indicated optically.
16. The improvement as defined in Claim 1, wherein said loading station is embodied as a drawer.

17. The improvement as defined in Claim 16, wherein said drawer is automatically openable and closable.
18. The improvement as defined in Claim 1, wherein said object carriers are loaded
5 from said plurality of processing stations in said loading station to desired ones of said multiple processing stations of said apparatus by said transport device.
19. The improvement as defined in Claim 1, wherein said transport device is embodied
10 as a robot arm having a gripper located at an end thereof.
20. In an apparatus for treating cytological or histological specimens, said apparatus
having multiple processing stations and a transport device for delivering said
specimens into and out of said processing stations, a loading station for loading
with specimens to be treated or object carriers carrying said specimens to be treated,
15 and a removal station for removing said treated specimens or said object carriers
carrying said treated specimens, the improvement comprising:
a plurality of processing stations allocated to said removal station.
21. The improvement as defined in Claim 20, wherein the number of processing
20 stations in said plurality of processing stations is selected by a user and can be varied.
22. The improvement as defined in Claim 21, wherein up to four processing stations
can be allocated to said removal station.
23. The improvement as defined in Claim 20, wherein said plurality of processing
25 stations comprises selectable processing stations each having a specific function.

24. The improvement as defined in Claim 20, wherein said plurality of processing stations are allocated to said removal station by means of said transport device.
25. The improvement as defined in Claim 20, wherein said plurality of processing stations can be allocated manually to said removal station.
26. The improvement as defined in Claim 25, wherein said plurality of processing stations are bolted onto said removal station.
27. The improvement as defined in Claim 25, wherein said plurality of processing stations are clamped onto said removal station by means of a bracket.
28. The improvement as defined in Claim 20, wherein said plurality of processing stations are embodied as containers for said object carriers.
29. The improvement as defined in Claim 20, wherein said removal station is equipped with sensors for detecting the presence of processing stations therein.
30. The improvement as defined in Claim 29, wherein said sensors identify the number of processing stations in said plurality of processing stations.
31. The improvement as defined in Claim 20, wherein said removal station is equipped with sensors for detecting the presence of said object carriers located in said plurality of processing stations.
32. The improvement as defined in Claim 31, wherein said sensors identify the number of object carriers in said plurality of processing stations.

33. The improvement as defined in Claim 31, wherein the occupancy of said object carriers present in said removal station is indicated acoustically.
34. The improvement as defined in Claim 31, wherein the occupancy of said object carriers present in said removal station is indicated optically.
35. The apparatus as defined in Claim 33, wherein complete filling of said removal station, and thus the need for removal, is indicated acoustically.
36. The apparatus as defined in Claim 34, wherein complete filling of said removal station, and thus the need for removal, is indicated optically.
37. The improvement as defined in Claim 20, wherein said removal station is embodied as a drawer.
38. The improvement as defined in Claim 37, wherein said drawer is automatically openable and closable.
39. The improvement as defined in Claim 20, wherein said object carriers are loaded from desired ones of said multiple processing stations of said apparatus to said plurality of processing stations in said removal station by said transport device.
40. The improvement as defined in Claim 20, wherein said transport device is embodied as a robot arm having a gripper located at an end thereof.

41. In a system having a plurality of sequentially arranged apparatuses for treating cytological or histological specimens, each said apparatus having multiple processing stations and a transport device for delivering said specimens into and out of said processing stations, a loading station for loading with specimens to be treated or object carriers carrying said specimens to be treated, and a removal station for removing said treated specimens or said object carriers carrying said treated specimens, the improvement comprising:
- 5 said transfer device serving to transfer said object carriers from an upstream apparatus to the apparatus with which said transport device is associated.
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42. The improvement as defined in Claim 41, wherein said transfer device further serves to transfer said object carriers from the apparatus with which said transport device is associated to a downstream apparatus.
- 15 43. The improvement as defined in Claim 41, wherein said apparatuses in said system are connected to communicate data with one another, whereby treatment of said specimens can be synchronized.